

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: PORTFOLIO

Report Number: P246088

Luminaire Tested: **LSR8B40D010 EC8B40950 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246088
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B40D010 EC8B40950 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4021.0 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

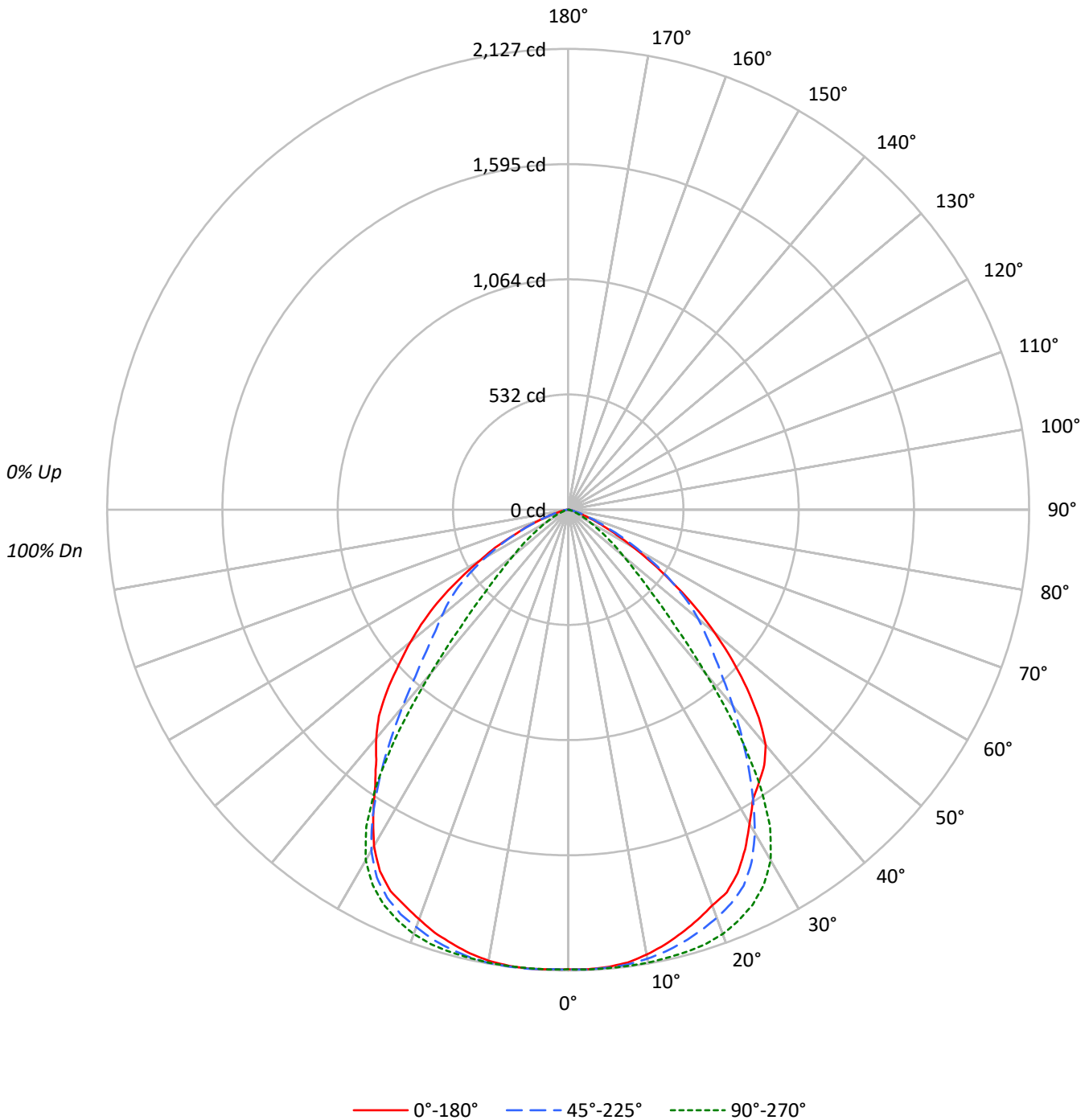
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	65422	65422	65422
5°	65564	65740	65812
10°	65289	66466	66181
15°	64566	67436	66166
20°	63790	68387	65995
25°	62962	68463	66061
30°	59566	66538	63825
35°	57788	57829	58431
40°	57072	39791	55466
45°	50853	23889	51550
50°	42283	15898	45565
55°	31714	10962	38633
60°	21493	7302	29146
65°	12966	4735	20022
70°	7186	2570	12316
75°	3253	1084	6374
80°	2824	1208	4457
85°	3220	1592	4423



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.5	5.0
10°-20°	588.0	14.6
20°-30°	892.5	22.2
30°-40°	937.4	23.3
40°-50°	702.8	17.5
50°-60°	450.9	11.2
60°-70°	192.9	4.8
70°-80°	45.6	1.1
80°-90°	8.5	0.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1683.0	41.9
0°-40°	2620.3	65.2
0°-60°	3774.1	93.9
0°-90°	4021.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4021.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2122	2122	2122	2122	2122	
5°	2118	2122	2124	2127	2126	201
15°	2022	2065	2112	2099	2073	570
25°	1850	1915	2012	1976	1942	845
35°	1535	1450	1536	1518	1552	963
45°	1166	953	548	926	1182	893
55°	590	590	204	615	719	535
65°	178	210	65	270	274	190
75°	27	32	9	55	54	40
85°	9	6	4	9	12	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2121.6	2121.6	2121.6	2121.6	2121.6	2121.6	2121.6	2121.6	2121.6	2121.6	2121.6
2.5°	2122.7	2125.0	2123.8	2123.8	2122.7	2123.8	2123.8	2126.1	2126.1	2123.8	2122.7
5°	2118.1	2120.4	2120.4	2118.1	2118.1	2123.8	2120.4	2122.7	2122.7	2121.6	2121.6
7.5°	2107.9	2107.9	2112.4	2109.0	2109.0	2112.4	2111.3	2113.6	2115.9	2117.0	2117.0
10°	2085.1	2087.4	2088.5	2088.5	2089.7	2093.1	2095.4	2099.9	2102.2	2104.5	2105.6
12.5°	2056.7	2060.1	2061.2	2060.1	2063.5	2068.0	2073.7	2079.4	2082.9	2087.4	2090.8
15°	2022.5	2022.5	2024.8	2028.2	2030.5	2037.3	2043.0	2049.8	2058.9	2064.6	2070.3
17.5°	1984.9	1987.2	1990.6	1990.6	1995.2	2006.5	2010.0	2020.2	2030.5	2036.2	2047.6
20°	1943.9	1946.2	1949.6	1951.9	1957.6	1966.7	1973.5	1982.6	1994.0	2004.3	2015.6
22.5°	1912.0	1907.5	1909.7	1912.0	1917.7	1925.7	1933.7	1945.0	1956.4	1966.7	1978.1
25°	1850.5	1851.7	1855.1	1857.4	1864.2	1871.0	1880.1	1893.8	1904.1	1915.4	1928.0
27.5°	1767.4	1768.5	1774.2	1774.2	1779.9	1791.3	1797.0	1808.4	1822.1	1833.4	1848.3
30°	1672.9	1675.1	1675.1	1679.7	1683.1	1688.8	1694.5	1705.9	1712.7	1723.0	1743.5
32.5°	1586.3	1588.6	1587.5	1586.3	1582.9	1581.8	1580.6	1582.9	1585.2	1588.6	1596.6
35°	1535.1	1529.4	1524.8	1516.9	1507.8	1496.4	1486.1	1472.5	1459.9	1449.7	1438.3
37.5°	1486.1	1485.0	1478.1	1466.7	1448.5	1428.0	1404.1	1374.5	1344.9	1313.0	1282.3
40°	1417.8	1414.4	1408.7	1392.7	1372.2	1347.2	1315.3	1278.9	1231.0	1182.1	1132.0
42.5°	1301.6	1302.8	1295.9	1283.4	1264.1	1240.1	1207.1	1167.3	1116.0	1057.9	993.0
45°	1166.1	1166.1	1163.8	1153.6	1139.9	1120.6	1095.5	1062.5	1012.4	953.2	883.7
47.5°	1024.9	1026.0	1022.6	1020.4	1014.7	1002.1	983.9	958.9	923.6	866.6	797.1
50°	881.4	881.4	887.1	886.0	886.0	881.4	873.5	858.6	827.9	782.3	717.4
52.5°	737.9	740.2	743.6	748.2	753.9	763.0	753.9	747.0	727.7	692.4	636.6
55°	589.9	592.2	597.9	605.8	612.7	621.8	624.0	624.0	613.8	589.9	547.8
57.5°	463.5	460.1	464.6	471.5	480.6	489.7	496.5	504.5	503.3	487.4	453.2
60°	348.5	349.6	353.0	359.9	366.7	374.7	383.8	390.6	394.0	386.1	364.4
62.5°	254.0	254.0	258.5	265.3	268.8	280.1	285.8	289.3	292.7	291.5	277.9
65°	177.7	179.9	182.2	185.6	189.0	195.9	199.3	206.1	208.4	209.5	199.3
67.5°	125.3	121.9	124.1	126.4	129.8	134.4	141.2	141.2	144.6	144.6	137.8
70°	79.7	79.7	80.9	84.3	86.5	87.7	90.0	92.2	95.7	94.5	94.5
72.5°	53.5	52.4	53.5	54.7	55.8	59.2	59.2	60.4	62.6	63.8	59.2
75°	27.3	28.5	30.7	29.6	33.0	30.7	31.9	35.3	34.2	31.9	31.9
77.5°	22.8	22.8	22.8	21.6	23.9	23.9	22.8	25.1	23.9	23.9	22.8
80°	15.9	17.1	15.9	14.8	15.9	14.8	14.8	14.8	14.8	14.8	13.7
82.5°	12.5	10.3	11.4	10.3	11.4	11.4	10.3	9.1	9.1	10.3	9.1
85°	9.1	6.8	8.0	8.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7
87.5°	5.7	3.4	3.4	3.4	4.5	4.5	4.5	3.4	4.5	4.5	2.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2121.6	2121.6	2121.6	2121.6	2121.6	2121.6	2121.6	2121.6	2121.6	2121.6	2121.6
2.5°	2125.0	2123.8	2126.1	2125.0	2125.0	2123.8	2125.0	2123.8	2126.1	2121.6	2122.7
5°	2125.0	2122.7	2123.8	2125.0	2126.1	2123.8	2123.8	2123.8	2126.1	2123.8	2125.0
7.5°	2120.4	2119.3	2122.7	2125.0	2123.8	2122.7	2125.0	2123.8	2126.1	2125.0	2127.2
10°	2111.3	2112.4	2114.7	2118.1	2119.3	2120.4	2122.7	2122.7	2126.1	2121.6	2123.8
12.5°	2097.7	2102.2	2107.9	2110.2	2114.7	2114.7	2117.0	2118.1	2120.4	2119.3	2122.7
15°	2080.6	2086.3	2093.1	2098.8	2104.5	2107.9	2111.3	2112.4	2115.9	2112.4	2113.6
17.5°	2060.1	2066.9	2077.1	2084.0	2093.1	2096.5	2101.1	2103.3	2106.8	2104.5	2105.6
20°	2031.6	2039.6	2051.0	2061.2	2066.9	2074.9	2080.6	2084.0	2086.3	2084.0	2085.1
22.5°	1991.7	2003.1	2017.9	2025.9	2037.3	2044.1	2045.3	2053.2	2058.9	2053.2	2055.5
25°	1945.0	1956.4	1967.8	1984.9	1995.2	2003.1	2011.1	2012.2	2017.9	2016.8	2015.6
27.5°	1867.6	1882.4	1901.8	1915.4	1929.1	1941.6	1950.8	1953.0	1958.7	1956.4	1957.6
30°	1761.7	1777.7	1795.9	1817.5	1836.9	1849.4	1860.8	1868.7	1874.4	1871.0	1869.9
32.5°	1611.4	1627.3	1646.7	1668.3	1691.1	1709.3	1723.0	1733.2	1740.1	1737.8	1732.1
35°	1439.4	1444.0	1456.5	1473.6	1492.9	1512.3	1524.8	1536.2	1544.2	1546.5	1546.5
37.5°	1262.9	1248.1	1239.0	1239.0	1250.4	1258.4	1269.7	1276.6	1289.1	1293.7	1297.1
40°	1092.1	1057.9	1026.0	1002.1	986.2	985.1	985.1	988.5	999.9	1014.7	1028.3
42.5°	939.5	884.8	835.9	791.5	759.6	741.4	733.4	734.5	743.6	757.3	780.1
45°	817.6	749.3	687.8	634.3	591.0	562.6	548.9	547.8	554.6	570.5	595.6
47.5°	723.1	650.2	580.8	519.3	472.6	441.8	425.9	421.4	425.9	440.7	470.3
50°	644.6	569.4	497.7	433.9	383.8	351.9	337.1	331.4	337.1	349.6	379.2
52.5°	571.7	494.2	427.0	365.6	312.0	284.7	268.8	265.3	268.8	283.5	307.5
55°	487.4	421.4	355.3	293.8	247.1	219.8	207.3	203.9	207.3	220.9	246.0
57.5°	404.3	347.3	289.3	233.4	193.6	169.7	158.3	153.7	161.7	170.8	200.4
60°	326.8	281.3	232.3	183.3	150.3	128.7	119.6	118.4	120.7	132.1	152.6
62.5°	256.2	218.7	179.9	140.1	112.7	103.6	92.2	91.1	93.4	100.2	116.2
65°	184.5	160.6	131.0	102.5	80.9	68.3	63.8	64.9	67.2	71.8	86.5
67.5°	128.7	111.6	91.1	71.8	55.8	50.1	45.6	44.4	45.6	53.5	61.5
70°	86.5	76.3	61.5	54.7	38.7	30.7	31.9	28.5	33.0	33.0	39.8
72.5°	56.9	50.1	41.0	31.9	27.3	21.6	21.6	20.5	22.8	23.9	29.6
75°	29.6	22.8	22.8	15.9	11.4	5.7	10.3	9.1	8.0	9.1	11.4
77.5°	20.5	17.1	15.9	12.5	11.4	9.1	9.1	9.1	9.1	10.3	11.4
80°	12.5	12.5	9.1	8.0	6.8	5.7	6.8	6.8	6.8	6.8	8.0
82.5°	8.0	6.8	6.8	5.7	5.7	4.5	4.5	4.5	4.5	4.5	6.8
85°	6.8	4.5	4.5	3.4	4.5	8.0	3.4	4.5	4.5	4.5	3.4
87.5°	2.3	3.4	3.4	3.4	2.3	1.1	2.3	3.4	3.4	5.7	4.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2121.6	2121.6	2121.6	2121.6	2121.6	2121.6	2121.6	2121.6	2121.6	2121.6	2121.6
2.5°	2125.0	2126.1	2126.1	2125.0	2125.0	2122.7	2127.2	2123.8	2125.0	2129.5	2126.1
5°	2127.2	2128.4	2128.4	2127.2	2127.2	2127.2	2128.4	2128.4	2127.2	2126.1	2128.4
7.5°	2131.8	2130.7	2130.7	2128.4	2128.4	2126.1	2128.4	2125.0	2127.2	2125.0	2128.4
10°	2126.1	2127.2	2126.1	2125.0	2125.0	2123.8	2123.8	2120.4	2121.6	2118.1	2120.4
12.5°	2122.7	2121.6	2121.6	2119.3	2117.0	2114.7	2113.6	2110.2	2110.2	2102.2	2105.6
15°	2113.6	2114.7	2111.3	2106.8	2104.5	2098.8	2096.5	2091.9	2087.4	2081.7	2082.9
17.5°	2105.6	2102.2	2097.7	2093.1	2084.0	2079.4	2074.9	2068.0	2065.7	2058.9	2056.7
20°	2081.7	2079.4	2073.7	2065.7	2060.1	2049.8	2045.3	2038.4	2032.7	2025.9	2022.5
22.5°	2051.0	2048.7	2041.8	2033.9	2024.8	2020.2	2015.6	2003.1	1997.4	1990.6	1989.5
25°	2012.2	2008.8	2002.0	1992.9	1988.3	1975.8	1971.2	1962.1	1959.9	1953.0	1951.9
27.5°	1953.0	1948.5	1940.5	1929.1	1921.1	1913.2	1908.6	1901.8	1899.5	1892.7	1891.5
30°	1864.2	1858.5	1842.6	1838.0	1824.3	1816.4	1816.4	1807.2	1808.4	1803.8	1803.8
32.5°	1724.1	1715.0	1702.5	1693.4	1684.3	1679.7	1679.7	1676.3	1678.6	1678.6	1680.9
35°	1538.5	1526.0	1519.1	1513.4	1513.4	1518.0	1531.7	1535.1	1541.9	1547.6	1552.2
37.5°	1300.5	1299.4	1307.3	1314.2	1331.2	1350.6	1374.5	1395.0	1414.4	1428.0	1441.7
40°	1043.1	1071.6	1094.4	1126.3	1152.4	1190.0	1233.3	1268.6	1301.6	1325.6	1350.6
42.5°	814.2	850.7	898.5	945.2	991.9	1043.1	1100.1	1149.0	1192.3	1225.3	1251.5
45°	634.3	684.4	742.5	801.7	862.1	925.8	985.1	1035.2	1080.7	1114.9	1141.1
47.5°	511.3	566.0	632.0	696.9	765.3	832.4	898.5	941.8	979.3	1006.7	1030.6
50°	422.5	480.6	550.0	624.0	692.4	759.6	816.5	858.6	889.4	913.3	928.1
52.5°	353.0	414.5	488.5	562.6	630.9	692.4	743.6	775.5	800.6	817.6	831.3
55°	291.5	350.8	420.2	489.7	556.9	614.9	657.1	681.0	700.3	710.6	718.6
57.5°	238.0	292.7	356.4	420.2	478.3	526.1	559.2	583.1	592.2	600.1	599.0
60°	186.8	238.0	296.1	350.8	400.9	439.6	463.5	477.1	484.0	487.4	485.1
62.5°	146.9	193.6	238.0	285.8	322.3	355.3	378.1	378.1	381.5	382.6	386.1
65°	109.3	144.6	183.3	218.7	248.2	269.9	282.4	285.8	290.4	289.3	287.0
67.5°	80.9	107.1	135.5	161.7	182.2	195.9	205.0	213.0	211.8	209.5	208.4
70°	55.8	72.9	97.9	113.9	128.7	142.4	144.6	145.8	146.9	148.0	145.8
72.5°	38.7	51.2	64.9	78.6	87.7	93.4	99.1	100.2	100.2	100.2	99.1
75°	19.4	26.2	38.7	44.4	52.4	54.7	59.2	59.2	62.6	58.1	56.9
77.5°	17.1	20.5	27.3	31.9	35.3	38.7	39.8	43.3	42.1	39.8	41.0
80°	10.3	12.5	17.1	19.4	23.9	25.1	26.2	27.3	26.2	27.3	27.3
82.5°	8.0	9.1	11.4	11.4	14.8	14.8	15.9	15.9	17.1	17.1	17.1
85°	4.5	8.0	6.8	13.7	9.1	9.1	11.4	13.7	11.4	11.4	13.7
87.5°	4.5	4.5	3.4	4.5	4.5	4.5	5.7	6.8	6.8	8.0	6.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P246088

CATALOG NUMBER: LSR8B40D010 EC8B40950 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2121.6	2121.6	2121.6	2121.6
2.5°	2125.0	2127.2	2123.8	2122.7
5°	2128.4	2128.4	2126.1	2126.1
7.5°	2128.4	2128.4	2125.0	2122.7
10°	2119.3	2119.3	2115.9	2113.6
12.5°	2102.2	2102.2	2101.1	2097.7
15°	2080.6	2080.6	2076.0	2072.6
17.5°	2051.0	2053.2	2047.6	2047.6
20°	2019.1	2017.9	2013.4	2011.1
22.5°	1986.1	1983.8	1982.6	1975.8
25°	1950.8	1948.5	1945.0	1941.6
27.5°	1890.4	1889.3	1885.8	1881.3
30°	1798.1	1797.0	1792.5	1792.5
32.5°	1678.6	1677.4	1672.9	1674.0
35°	1554.4	1559.0	1556.7	1552.2
37.5°	1450.8	1454.2	1456.5	1454.2
40°	1364.3	1374.5	1375.7	1377.9
42.5°	1272.0	1285.7	1290.3	1292.5
45°	1161.6	1174.1	1184.3	1182.1
47.5°	1048.8	1057.9	1067.0	1060.2
50°	940.6	946.3	949.8	949.8
52.5°	838.2	838.2	837.0	838.2
55°	720.8	720.8	716.3	718.6
57.5°	597.9	600.1	596.7	591.0
60°	484.0	478.3	476.0	472.6
62.5°	376.9	376.9	369.0	379.2
65°	282.4	279.0	275.6	274.4
67.5°	205.0	203.9	200.4	199.3
70°	144.6	140.1	138.9	136.6
72.5°	96.8	96.8	94.5	94.5
75°	59.2	53.5	52.4	53.5
77.5°	41.0	39.8	39.8	38.7
80°	27.3	26.2	28.5	25.1
82.5°	17.1	18.2	17.1	18.2
85°	11.4	13.7	12.5	12.5
87.5°	6.8	6.8	6.8	6.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)